

IN THE CLAIMS:

Please replace all prior versions of the claims in this application with the following listing of claims:

1. (Currently Amended) A device for creating an end-to-side anastomosis between a first anatomical vessel and a second anatomical vessel, the device comprising:

a substantially cylindrical extravascular body, at least a portion of the body fabricated from a resorbable sponge material, the body comprising an inner surface defining a through opening configured to receive at least a portion of the first anatomical vessel, the body further comprising a proximal flat surface configured to appose an outer surface of the second anatomical vessel, a distal surface distanced from said outer surface of the second anatomical vessel, and a straight side surface connecting the proximal surface and the distal surface, thereby providing a uniform diameter of the substantially cylindrical body, said through opening extending from the proximal surface to the distal surface;

first securing means disposed on the inner surface of the body, for adhesively securing at least an end of the first anatomical vessel to the inner surface of the body; and

second securing means for securing said outer surface of the second anatomical vessel to said proximal surface of the cylindrical body such that a hole formed in said outer surface of the second anatomical vessel is in fluid communication with said end of the first anatomical vessel.
2. (Canceled)
3. (Withdrawn) The device of claim 1, wherein the body is sleeve-shaped.

4. (Previously Presented) The device of claim 1, wherein the first securing means comprises the adhesive adapted to be disposed between the outer surface of the first anatomical vessel and the inner surface that forms the opening.

5. (Previously Presented) The device of claim 4, wherein the first securing means further comprises sealing means for sealing the outer surface of the first anatomical vessel against the inner surface that forms the opening.

6. (Previously Presented) The device of claim 5, wherein the sealing means comprises a catheter having a balloon, the catheter being disposed in the first anatomical vessel such that when inflated, the balloon urges the outer surface of the first anatomical vessel against the inner surface that forms the opening to sandwich the adhesive therebetween.

7. (Previously Presented) The device of claim 1, wherein the second securing means comprises an adhesive adapted to be disposed between said outer surface of the second anatomical vessel and said proximal surface of the body.

8. (Previously Presented) The device of claim 7, wherein the adhesive is disposed on at least the inner surface that forms the opening.

9. (Original) The device of claim 8, wherein the sponge material contains pores and the adhesive is further disposed in the pores of the sponge material.

10. (Withdrawn) The device of claim 1, further comprising an alignment means for aligning the opening with the hole in the second vessel.

11. (Withdrawn) The device of claim 10, wherein the alignment means comprises a radially compressible member having a cylindrical body embedded in the body circumferentially about the opening, the radially compressible member further having a plurality of pins protruding from the body.

12-13. (Cancelled)

14. (Original) The device of claim 1, wherein the sponge material contains pores and the device further comprising a medicating agent disposed in at least a portion of the pores of the sponge material.

15. (Original) The device of claim 14, wherein the medicating agent is an anastomosis modulating agent.

16. (Withdrawn) A device for creating a side-to-side anastomosis between first and second vessels, the device comprising:

a body, at least a portion of which is fabricated from a sponge material, the body having an opening formed therein;

first securing means for securing a side of the first vessel to the body; and

second securing means for securing a side of the second vessel to the body such that a

hole formed in the side of the first and second vessels are each in fluid communication with the opening.

17. (Withdrawn) The device of claim 16, wherein the body is disk-shaped and having a slot of semicircular cross-section corresponding to each of the first and second vessels for acceptance thereof, each of the slots communicating through the opening.

18. (Withdrawn) The device of claim 16, wherein at least one of the first and second securing means comprises an adhesive disposed between an outer surface of the first and/or second vessel and a corresponding surface of the body.

19. (Withdrawn) The device of claim 18, wherein the at least one of the first and second securing means further comprises sealing means for sealing the outer surface of the first and/or second vessel against the corresponding surface of the body.

20. (Withdrawn) The device of claim 19, wherein the sealing means comprises a catheter having a balloon, the catheter being disposed in the first and/or second vessel such that when inflated, the balloon urges the outer surface of the first and/or second vessel against the corresponding surface of the body to sandwich the adhesive therebetween.

21. (Withdrawn) The device of claim 18, wherein the sponge material contains pores and the adhesive is disposed in pores of the sponge material.

22. (Withdrawn) The device of claim 16, further comprising an alignment means for aligning the opening with at least one of the holes in the first and second vessels.

23. (Withdrawn) The device of claim 22, wherein the alignment means comprises a radially compressible member having a cylindrical body embedded in the body circumferentially about the opening, the radially compressible member further having a plurality of pins protruding from the body.

24. (Withdrawn) The device of claim 23, wherein at least a portion of the radially compressible member is fabricated from a resorbable material.

25. (Withdrawn) The device of claim 17, wherein the sponge material is resorbable.

26. (Withdrawn) The device of claim 17, wherein the sponge material contains pores and the device further comprising a medicating agent disposed in at least a portion of the pores of the sponge material.

27. (Withdrawn) The device of claim 26, wherein the medicating agent is an anastomosis modulating agent.

28. (Withdrawn) The device of claim 18, wherein at least one of the first and second securing means comprises an adhesive disposed on a surface of the slot for adhering the first and/or second vessel to the corresponding slot.

29. (Currently Amended) A method for creating an anastomosis between a first anatomical vessel and a second anatomical vessel, the method comprising:

handling a substantially extravascular cylindrical body, at least a portion of the body fabricated from a resorbable sponge material, the cylindrical body comprising an inner surface defining a through opening configured to receive at least a portion of the first anatomical vessel, the cylindrical body further comprising a proximal flat surface configured to appose an outer surface of the second anatomical vessel, a distal surface distanced from said outer surface of the second anatomical vessel, and a straight side surface connecting the proximal surface and the distal surface, thereby providing a uniform outer diameter of the cylindrical body, the through opening extending from the proximal surface to the distal surface of the cylindrical body;

adhesively attaching the portion of the first anatomical vessel to said inner surface of the cylindrical body;

attaching the outer surface of the second anatomical vessel to said proximal surface of the cylindrical body; and

creating an anastomosis between the first and second anatomical vessels and through the through opening in the body.

30. (Previously Presented) The method of claim 29, wherein attaching the portion of the first anatomical vessel to the body comprises attaching an end portion of the first anatomical vessel to the opening and attaching the portion of the second anatomical vessel to the body comprises attaching a side portion of the second anatomical vessel to the portion of the outer surface of the body.

31. (Previously Presented) The method of claim 30, wherin creating the anastomosis between the portions of the first and second anatomical vessels further comprises forming a hole in the portion of the second anatomical vessel in alignment with the end of the first anatomical vessel and the opening in the body.

32. (Previously Presented) The method of claim 31, wherein forming the hole is subsequent to attaching the portion of the second anatomical vessel to the body.

33. (Previously Presented) The method of claim 31, wherein forming the hole is prior to attaching the portion of the second anatomical vessel to the body.

34. (Withdrawn) The method of claim 29, wherin the attaching of the portion of the first vessel to the body comprises attaching a side portion of the first vessel to the body and the attaching of the portion of the second vessel to the body comprises attaching a side portion of the second vessel to the body.

35. (Withdrawn) The method of claim 34, wherin the creating of the anastomosis between the portions of the first and second vessels comprises forming holes in the side portions of the first and second vessels corresponding to each other and the opening in the body.

36. (Withdrawn) The method of claim 35, wherein the forming of at least one of the holes in the side portions of the first and second vessels is subsequent to the attaching of the corresponding side portion to the body.

37. (Withdrawn) The method of claim 35, wherein the forming of at least one of the holes in the side portions of the first and second vessels is prior to the attaching of the corresponding side portion to the body.

38. (Previously Presented) The method of claim 29, wherein the attaching of at least one of the portion of the first anatomical vessel and the portion of the second anatomical vessel to the body comprises adhering at least one of the portion of the first anatomical vessel and the portion of the second anatomical vessel to the body with an adhesive disposed between an outer surface of at least one of the portion of the first anatomical vessel and the portion of the second anatomical vessel and the body.

39. (Previously Presented) The method of claim 38, further comprising sealing the outer surface of at least one of the portion of the first anatomical vessel and the portion of the second anatomical vessel to the body.

40. (Previously Presented) The method of claim 39, wherein the sealing comprises inflating a balloon in a lumen of at least one of the portion of the first anatomical vessel and the portion of the second anatomical vessel to urge the outer surface of the at least one of the portion of the first

anatomical vessel and the portion of the second anatomical vessel against the body and to sandwich the adhesive therebetween.

41. (Previously Presented) The method of claim 29, further comprising aligning a hole in one of the first and second anatomical vessels with the opening in the body.

42. (Previously Presented) The device of claim 1, wherein blood flows intraluminally through the first and second anatomical vessels.

43. (Previously Presented) The method of claim 29, wherein blood flows intraluminally through the first and second anatomical vessels.

44. (Previously Presented) The device of claim 1, wherein an axis of the cylindrical body, around which said outer surface of the cylindrical body is substantially symmetrical, is substantially perpendicular to said outer surface of the second anatomical vessel.

45. (Previously Presented) The device of claim 44, wherein said through opening of the cylindrical body forms an acute angle relative to said outer surface of the second anatomical vessel.

46. (Previously Presented) The device of claim 1, wherein an axis of the cylindrical body, around which said outer surface of the cylindrical body is substantially symmetrical, forms an acute angle relative to said outer surface of the second anatomical vessel.

47. (Previously Presented) The device of claim 46, wherein a thickness of the cylindrical body defined by the side surface and inner surface of the cylindrical body is substantially consistent from the proximal surface to the distal surface of the cylindrical body.

48. (New) A device for creating an end-to-side anastomosis between a first anatomical vessel and a second anatomical vessel, the device comprising:

a substantially cylindrical extravascular body, at least a portion of the body fabricated from a resorbable sponge material, the body comprising an axis, a proximal end, a distal end, an inner curved surface and an outer curved surface, the inner curved surface defining an opening configured to receive at least a portion of the first anatomical vessel, the outer curved surface defining a uniform diameter of the body, the proximal end and the distal end each having a flat surface perpendicular to the axis of the cylindrical body, the flat surface of the proximal end being configured to attach to an outer surface of the second vessel;

first adhesive securing means disposed on the inner surface of the body; and
second adhesive securing means disposed on the flat surface of the proximal end, such that a hole formed in said outer surface of the second anatomical vessel is in fluid communication with said portion of the first anatomical vessel.